

**Directions:** All questions must be completed on loose leaf. A calculator is allowed. Please reduce any fractions to lowest terms. Place a box around your final answer. **ALL WORK MUST BE SHOWN FOR FULL VALUE.**

**Part A:** 1 mark each for a-d, 2 marks each for e-h /12  
Evaluate each of the following:

a)  $125.3 - (-32.9)$    b)  $-0.029 - 0.18$    c)  $(-5.7)(-8.2)$    d)  $(36.4) \div (-4)$

e)  $-1\frac{1}{4} + \left(-2\frac{1}{16}\right)$    f)  $3\frac{1}{2} - \left(-2\frac{4}{6}\right)$    g)  $\left(-1\frac{3}{7}\right)\left(3\frac{1}{4}\right)$    h)  $\left(-2\frac{1}{3}\right)\left(-1\frac{5}{7}\right)$

**Part B:** Please answer all questions. 3 marks each /12

1) Order the following rational numbers on a number line:

$$-2.9 \quad \frac{1}{2} \quad \frac{-7}{3} \quad 1.9 \quad -2\frac{5}{8} \quad \frac{12}{6}$$

2) Find 3 rational numbers between  $\frac{-5}{4}$  and  $-1.3$

3) Circle at which step an error occurred and explain the error. Then, re-do this question correctly.

$3(15 - 5 \times 2^2)$	
$=3(15 - 5 \times 4)$	Step 1
$=3(15 \times 9)$	Step 2
$=3(135)$	Step 3
$=405$	Step 4

4) The temperature of a freezer changed from  $-18.9^{\circ}\text{C}$  to  $-14.3^{\circ}\text{C}$ .

- By how much did the temperature change?
- Is this an increase or decrease in temperature? Explain how you know.
- By how much does the temperature need to change again before it is at  $-5.1^{\circ}\text{C}$ ?

**Part C:** Complete question 1 and choose any 2 of the remaining 3 questions.  
4 marks each /12

1) Evaluate:

$$\frac{\frac{2}{6} + \frac{3}{12}}{\frac{-1}{2} - 2\frac{3}{5}} \times (-3) \div 5$$

(Leave answer in fraction form)

2) A mountain climber descends from base camp at an average speed of 3.8 m/min. How far below base camp will the climber be after 3.75 min? Use a vertical number line with base camp at 0 to illustrate the climber's descent.

3) For the expression:

$$\frac{1}{3} - \frac{1}{7} \times \frac{1}{3} - \frac{1}{7}$$

a) Evaluate.

b) By inserting one pair of brackets, how many different answers can you get? (i.e., try inserting brackets in various positions)

c) By inserting two pairs of brackets, can you get an answer that is different?

4) Craig & Will shared a meat pizza and a works pizza of the same size. The meat pizza was cut into 6 equal slices and the works pizza was cut into 7 equal slices. Craig ate two slices of meats and three slices of works. Will ate three slices of meats and two slices of works.

a. Who ate more pizza?

b. How much more did that person eat?

c. How much pizza was left over?